

ADDENDUM NO. 5  
TO  
PLANS AND SPECIFICATIONS  
FOR  
PĀHOA PARK MASTER PLAN  
PHASE I  
JOB NO. PR-4234  
AT  
PĀHOA, PUNA, HAWAI‘I  
COUNTY AND STATE OF HAWAI‘I

**NOTICE TO BIDDERS**

The items listed below are made a part of the current contract and shall govern the work, taking precedence over the previously issued specifications and drawings governing the particular item of work mentioned.

**PRE-QUALIFIED AND APPROVED SUBSTITUTIONS**

The following items hereinafter listed are approved as equal to the previously specified items, provided all requirements of the contract documents are met.

Approval shall not in any circumstances be construed as an approval for deviations from the contract documents unless the entity seeking such approval has in writing, specifically called the engineer or approving agency's attention to each such deviation at the time of submission. Said entity and / or contractor shall be responsible for the coordination of the work pertinent of the effected materials, equipment and labor to insure proper execution of work as per the intent of the documents.

<b>Section and Paragraph</b>	<b>Specified Item or Product</b>	<b>Accepted Substitution</b>	<b>Remarks</b>
Sheet EG1006	<b>Lithonia</b> DOM8LED-1500L-3500K- DO8AZ-TRW	<b>Peachtree Lighting</b> 6BLRD-VR-15-35K-W-CP- WL-UNV	
Sheet EG1006	<b>Kenall</b> MLHA8-48-R-MW-PP- 50L50K-DV-DL-PM	<b>Eclipse</b> 574-OPL50-5K-EBU-WH- PEND	
09621	<b>Sport Court</b> PowerGame	<b>Action Floor Systems LLC</b> QuickCourt DC	
11485	<b>Various Manufacturers</b> As listed in 11485, 2.02	<b>Porter Athletic Equipment Company</b> 2084 Center-Roll	
11680	<b>GameTime®</b> Various Components	<b>Little Tikes</b> Various Components	See attached revised specification section 11680, 16 -pages

## **SPECIFICATIONS**

### **ITEM NO. 1 – SPECIAL NOTICE TO BIDDERS**

**DELETE** Special Notice to Bidders issued as Addendum No. 3 in its entirety and **REPLACE** with the attached 4 pages.

### **ITEM NO. 2 – PROPOSAL**

**DELETE** Proposal pages 10-12 issued as Addendum No. 3 in their entirety and **REPLACE** with the following pages 10-12. 3 pages attached.

### **ITEM NO. 3 – SPECIAL PROVISIONS**

**DELETE** Special Provision, Section 5.6 (g) – Project Sign and **REPLACE** with the following:

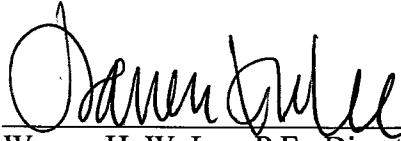
Section 5.6 (g) - Project Sign. Delete Section 5.6(g) in its entirety and replace with the following:

“When specified in the proposal or construction plans, the Contractor shall furnish and install two (2) project signs. One sign shall contain the project information and the second sign shall contain a full color rendering of the proposed facility. In general, if the project is for a repair maintenance or renovation of an existing facility, then only one (1) project informational sign will be required. Sign(s) shall be constructed of 4’ x 8’ x 3/4” exterior grade plywood mounted at a minimum of 7 feet from grade to bottom edge of sign. Graphic content for each sign shall be provided by the owner to the contractor in digital format.

The Contractor shall submit a layout of the sign before proceeding with the work and shall make all requested changes. The approved project sign(s) shall be rigidly and firmly braced and securely attached to supports and shall be so constructed to withstand wind pressure of not less than 30 pounds per square foot of area subject to pressure.”

**ITEM NO. 4 – SECTION 11680 – PLAYGROUND EQUIPMENT**

**DELETE** Section 11680 issued as Addendum No. 3 in its entirety and **REPLACE** with the attached 16 pages.



Warren H. W. Lee, P.E., Director  
Department of Public Works  
County of Hawai'i

Date Issued: May 2, 2014

Please detach and execute the receipt below. Return immediately via facsimile (808) 961-8630 or mail to the Administration Office, Department of Public Works, County of Hawai'i at Aupuni Center, 101 Pauahi Street, Suite 7, Hilo, HI 96720-4224.

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Receipt of Addendum No. 5 via website for the PĀHOA PARK MASTER PLAN PHASE I, Job No. PR-4234, Pāhoa, Puna, Hawai'i, is hereby acknowledged.

Signed \_\_\_\_\_

Title \_\_\_\_\_

Firm \_\_\_\_\_

Date \_\_\_\_\_

## SPECIAL NOTICE TO BIDDERS

**“Reminder Note:** “A” general engineering contractors and “B” general building contractors are reminded that due to the Hawaii Supreme Court’s January 28, 2002 decision in Okada Trucking Co., Ltd. v. Board of Water Supply, et al., 97 Haw. 450 (2002), they are prohibited from undertaking any work, solely or as part of a larger project, which would require the general contractor to act as a specialty contractor in any area where the general contractor has no license. Although the “A” and “B” contractor may still bid on and act as the “prime” contractor on a “A” or “B” project (See, HRS § 444-7 for the definitions of an “A” and “B” project.), respectively, the “A” and “B” contractor may only perform work in the areas in which they have the appropriate contractor’s license (An “A” or “B” contractor obtains “C” specialty contractor’s licenses either on its own, or automatically under HAR § 16-77-32.). The remaining work must be performed by appropriately licensed entities.

**As stated in the Notice to Bidders, Bidders must possess a valid State of Hawai‘i General Engineering Contractor’s “A” license or General Building Contractor’s “B” license.**

**Each of the following specialty contractor classifications listed in the table below have been determined by the County of Hawai‘i as qualified to perform all of the work on this project based on the project’s scope and the County’s understanding of the State’s licensing requirements and specialty contractor classifications’ scopes of work. By way of the minimum licensing requirement stated for this project, no additional specialty contractor classifications are required to perform the work; however, the Bidder may list additional licensed subcontractors at its discretion.**

<b>Specialty Contractor Classification &amp; Scope of Work</b> [per HAR, Title 16, Chapter 77, Exhibit A, as supplemented by the State Department of Commerce and Consumer Affairs, Professional and Vocational Licensing Division, Contractor Licensing Board]		<b>Project Scope of Work Applicability</b>	
		<b>Base Bid</b>	<b>Alternate Bid Item #s</b>
C-3 <sup>A</sup>	Asphalt paving and surfacing contractor	✓	6
C-5 <sup>3</sup>	Cabinet, millwork, and carpentry remodeling and repairs contractor	✓	n/a
C-6 <sup>3</sup>	Carpentry framing contractor	✓	n/a
C-9 <sup>A</sup>	Cesspool contractor	✓	n/a
C-12 <sup>3</sup>	Drywall contractor	✓	n/a
C-13	Electrical contractor	✓	1,2,3,4,5
C-17 <sup>A</sup>	Excavating, grading, and trenching contractor	✓	1,2,3,4,5, 6
C-20	Fire protection contractor	✓	n/a
C-21	Flooring contractor	✓	n/a
C-22	Glazing and tinting contractor	✓	n/a
C-25 <sup>3</sup>	Institutional and commercial equipment contractor	✓	n/a
C-27	Landscaping contractor	✓	1,2,3,4,5, 6
C-31	Masonry contractor	✓	5
C-32 <sup>A</sup>	Ornamental, guardrail, and fencing contractor	✓	4
C-33	Painting and decorating contractor	✓	5,6
C-37	Plumbing contractor	✓	5
C-41	Reinforcing steel contractor	✓	5

C-42	Roofing contractor	✓	n/a
C-43 <sup>Δ</sup>	Sewer, sewage disposal, drain, pipe laying contractor	✓	5
C-44	Sheet metal contractor	✓	5
C-48	Structural steel contractor	✓	5
C-51	Tile contractor	✓	5
C-52	Ventilating and air conditioning contractor	✓	n/a
C-56 <sup>Δ</sup>	Welding contractor	✓	5
	Pest Control Applicator	✓	5
<sup>Δ</sup> Classification automatically held by a general engineering contractor "A" per HAR §16-77-32(a) & (d)			
<sup>Δ</sup> Reference HAR §16-77-32(b) for portions of scope authorized to a general engineering contractor "A"			
<sup>Δ</sup> Classification automatically held by a general building contractor "B" per HAR §16-77-32(c) & (d)			
<b>SPECIAL INSTRUCTIONS TO BIDDERS REGARDING SPECIALTY CONTRACTOR CLASSIFICATIONS AND REGARDING JOINT CONTRACTORS &amp; SUBCONTRACTORS:</b>			
1)	Bidder shall be intimately familiar with the scopes of work each specialty contractor classification is licensed to perform under Hawai'i Administrative Rules §16-77, the scope of work established for this project, and how the specialty contractor classifications' licenses apply in the proper execution and fulfillment of the project's scope of work.		
2)	In the circumstance where a specialty contractor classification license listed in the above table may be deemed unnecessary by a Bidder due to its intent to employ a plausible alternative means or method, the Bidder shall in its Proposal clearly state such intent and provide a detailed plan that meets with the satisfaction of the Director. The Director reserves the sole discretion and right to determine whether the Bidder's proposed justification for not listing the required license is acceptable.		
3)	In the circumstance where the Bidder is licensed in one or more specialty contractor classifications required of the project (whether automatically as a general engineering contractor "A", general building contractor "B", or outright) and it intends to perform all or some of the work of those classifications using its own workforce, the Bidder shall, in its Proposal, list itself accordingly and in consideration of the balance of the instructions herein provided.		
4)	In the circumstance where a specialty contractor classification required in the above table may, in part or in whole (as applicable to the classification's scope of work), be within the licensed scope of work of another listed specialty contractor classification (e.g. overlapping scopes of licenses), the Bidder shall clearly delineate in its Proposal the extent of each subcontractor's responsibility on the project such that the Director can reasonably determine which classification is responsible for the corresponding scopes. Where a listed specialty contractor classification is rendered completely unnecessary due to overlapping scopes of work, the Bidder, in its Proposal, shall clearly state such as the reason for not listing that respective entity in its Proposal.		
5)	In the circumstance where a Bidder intends to use more than one appropriately licensed entity in the performance of work covered under a specific specialty contractor classification, the Bidder shall clearly delineate in its Proposal the extent of each subcontractor's responsibility on the project.		
6)	The Bidder shall ensure that, in its Proposal, it provides the name of each person or firm to be engaged by the Bidder as a joint contractor, subcontractor, or lower-tier subcontractor in the performance of the contract and the nature and scope of the work to be performed by each in sufficient detail so as the Director can fully comprehend how all aspects of the project are intended to be executed. The Director reserves the right to request supplemental information as necessary for determining Bidder's responsibility and responsiveness.		
7)	The Bidder is solely responsible to ensure that all of its listed joint contractors' and subcontractors' licenses are current, valid & in good standing at the time of bid opening through the time the contract is fully executed, without any change in status. Bidder shall ensure that its license and those of its listed joint contractors and subcontractors are successfully renewed without expiring. Failure to do so may result in a determination of non-responsibility or non-responsiveness.		

Anyone who disagrees with the determination in the above table shall submit their written objection to the Director identifying the specialty contractor classification(s) in question and the justification(s) for such position at least 10 consecutive calendar days prior to bid opening. If no such written objections are received by the Director prior to such date, it will

be presumed that all Bidders and affected parties are in agreement with the listing set forth above. No other specialty license will be required unless noted otherwise in an addendum.

The Bidder may utilize subcontractors holding specialty contractor classifications' licenses in addition to those listed above to accomplish the Project; however, should it do so, its Proposal form shall identify those classifications and the name(s) of the respective company(ies).

### **RESPONSIBILITY OF OFFERORS**

Offeror is advised that if awarded a contract under this solicitation, Offeror shall, upon award of the contract, furnish proof of compliance with the requirements of §103D-310(c), HRS:

1. Chapter 237, tax clearance;
2. Chapter 383, unemployment insurance;
3. Chapter 386, workers' compensation;
4. Chapter 392, temporary disability insurance;
5. Chapter 393, prepaid health care; and
6. One of the following:
  - a. Be registered and incorporated or organized under the laws of the State, hereinafter referred to as a "Hawaii business"; **or**
  - b. Be registered to do business in the State, hereinafter referred to as a "compliant non-Hawaii business."

Refer to the Award of Contract provision (see Special Provisions) for instructions on how to comply with the above requirements.

### **CAMPAIGN CONTRIBUTIONS BY STATE AND COUNTY CONTRACTORS PROHIBITED, PURSUANT TO HAWAII REVISÉD STATUTES (HRS) §11-355**

If awarded a contract in response to this solicitation, offeror agrees to comply with HRS §11-355, which states that campaign contributions are prohibited from a State and County government contractor during the term of the contract if the contractor is paid with funds appropriated by the legislative body between the execution of the contract through the completion of the contract.

### **HAWAII REVISÉD STATUTES, CHAPTER 103B - EMPLOYMENT OF STATE RESIDENTS ON CONSTRUCTION PROCUREMENT CONTRACTS, AS AMENDED, BY ACT 192 SLH 2011**

HRS Chapter 103B, unless its application is in conflict with any federal law or will disqualify the County from receiving federal funds or aid, shall apply to this contract. It requires the Contractor and applicable subcontractor(s) to perform its contract with a workforce of which not less than eighty percent (80%) are Hawai'i residents. Reference Special Provisions 7.1(p) for related project specific requirements.

### **HAWAII REVISÉD STATUTES, SECTION 103-55.6, PREFERENCE FOR BIDDERS IN APPRENTICESHIP PROGRAMS, ACT 17, SLH 2009**

The preference for bidders in apprenticeship programs [reference Special Provisions Section 7.1, Subsection (o) and Item 10, Section (B)] shall apply to this project if the estimated cost is \$250,000.00 or more, unless it is in conflict with any federal law or if it would disqualify the County from receiving federal funds or aid.

### **PROOF OF CERTIFICATION AND COMPLIANCE**

Where, in the technical specifications for this project, requirements are prescribed that:

1. A manufacturer, fabricator, supplier, or similar entity possess a minimum documented history manufacturing, providing and/or servicing a particular product or system that will be utilized on this project; and/or
2. The contractor, subcontractor, installer, or similar entity possess a minimum level of documented successful experience (e.g., number of years, number of projects, etc.) or proficiency specializing in the installation of a particular item of work; and/or
3. The contractor, subcontractor, installer, or similar entity hold a manufacturer's certification or approval to install its product or system; and/or
4. Mandates some other form of measurable criteria to ensure a minimum level of quality and success in accomplishing the work of this project;

All Bidders ensure that the entities it employs or contracts with for applicable scopes of work comply with the necessary requirements and it shall be ready to submit requisite proofs of compliance that is sufficient for the Director to reasonably determine the responsiveness and responsibility of the Bidder's overall offer. The apparent low bidder shall submit all necessary documentation in satisfaction thereof to the Director within five (5) consecutive calendar days of the bid opening. Failure to provide adequate documentation to the Director's satisfaction may result in a determination that the Bidder is nonresponsive and/or non-responsible.

Revised: 3/6/2014

## LISTING OF RESPONSIBLE ENTITIES

In compliance with the provisions of Chapter 103D-302, HRS, and Chapter 3-122-21, Subchapter 5, Hawai'i Administrative Rules, the Bidder shall record hereinafter the names of each person or firm to be engaged by the Bidder as a joint contractor or subcontractor in the performance of the public work construction contract.

In order for the County to ensure the Bidder's compliance with the Hawai'i Supreme Court's January 28, 2002 decision in *Okada Trucking Co., Ltd. V. Board of Water Supply, et. al.*, 97 Haw. 450 (2002), the Bidder shall record hereinafter the names of each joint contractor, subcontractor, lower tier subcontractor or other entity that it intends to perform work on this Project.

In order for the County to determine the Bidder's responsiveness and responsibility, the Bidder shall provide the corresponding contractor license identification number issued by the State and describe the nature and scope of the work to be performed by each entity listed. Where work is to be performed by the Prime Contractor (Bidder) it shall list itself accordingly as the responsible entity.

Bids that do not comply with the requirements may be rejected at Director's discretion. Reference the Special Notice to Bidders for additional instructions and guidance.

The classifications listed below are provided for the convenience of the bidder only, bidders are required to verify the minimum licensing required in the Special Notice to Bidders as may be amended.

<b>Name of Responsible Entity:</b> (i.e., Prime-, Joint- or Sub- Contractor, etc.)	<b>License I.D.</b>	<b>Nature and Scope of Work</b>
<b>C-3</b>		Asphalt Paving and Surfacing
<b>C-5</b>		Cabinet, Millwork, and Carpentry Remodeling and Repairs
<b>C-6</b>		Carpentry Framing
<b>C-9</b>		Cesspool
<b>C-12</b>		Drywall
<b>C-13</b>		Electrical
<b>C-17</b>		Excavating, Grading, and Trenching
<b>C-20</b>		Fire Protection
<b>C-21</b>		Flooring
<b>C-22</b>		Glazing and Tinting
<b>C-25</b>		Institutional and Commercial Equipment
<b>C-27</b>		Landscaping



(Attach additional sheets as necessary)  
revised: 3/4/2014

## **SECTION 11680 - PLAYGROUND EQUIPMENT**

### **PART 1 - GENERAL**

1.01 **GENERAL CONDITIONS:** As specified in Section 00700.

1.02 **DESCRIPTION OF WORK**

Furnish all materials, accessories, labor, tools and equipment required for the preparation and installation of playground equipment as indicated on the drawings and specified herein.

1.03 **REFERENCES**

- A. U.S. Consumer Product Safety Commission Publication (CPSC) 3325, "Handbook for Public Playground Safety", November 2010 (or most current edition).
- B. ASTM F1292 Standard Specification for Impact Attenuation of Surfacing Materials within the Use Zone of Playground Equipment
- C. ASTM F1487 Standard Consumer Safety Performance Specification for Playground Equipment for Public Use

1.04 **SUBMITTALS**

- A. The following items shall be submitted as a complete set: piecemeal submittals shall not be acceptable and the time allotted for review of the submittal shall not commence until the complete set is received by the County. Claims for delay due to the contractor's failure to provide complete submittals shall not be entertained by the County and all costs, time lost, etc. shall be the contractor's sole concern and responsibility.
  - 1. One (1) each original affidavit(s) signed by the manufacturer(s) and supplier(s) of the playground equipment proposed to be furnished under this Section certifying that such materials delivered to the project site conform to the requirements of these specifications.
  - 2. Three (3) copies of the manufacturer's descriptive technical literature of all components it proposes to use in the playground equipment system provided for this project. The latest manufacturer's product data shall be submitted to ensure that the latest up-to-date models are used. All literature shall be originals, (copies will not be accepted) with all technical data (dimensions, gauges, thicknesses, material description, clear zone requirements, etc.); sales brochures or marketing literature shall not be acceptable to satisfy this obligation.
  - 3. A layout plan (scaled at 1/2" = 1'-0" minimum) of the complete playground equipment system proposed for the project consisting of the following information:
    - a. Dimensions of the overall effective playground surface area (less edge transitions and curbing) required for the project and overall dimensional layouts for the entire installation including edge transitions and perimeter edge treatments. Provide dimensions necessary for laying out the equipment for installation.

- b. All components shall be clearly distinguishable and labeled with the manufacturer's model number for cross referencing of manufacturer's descriptive literature and verification of satisfaction of the minimum requirements of this section.
  - c. Clearly label all deck heights
  - d. Clearly label and demarcate all play components/elements that satisfy the 2010 ADA Standards for Accessible Design and the U.S. Consumer Product Safety Commission's requirements for playgrounds.
  - e. Demarcate and dimension all minimum fall safety zones (in accordance with the most stringent and up to date standards) for each play element that requires Such and minimum distances required between adjacent play elements or equipment, as applicable.
  - f. Dimension distances from ends of slide-type and climbing-type elements to edge of effective playground surfacing area when such is less than 8-feet.
- 4. Manufacturer's installation manual complete with instructions for each of the products being installed.
  - 5. An example of the manufacturer's warranty document to be issued for this project that satisfies the terms of the warranty required of this section.

***No ordering of materials shall be done until all of the submittal (s) specified above have been approved by the Director.***

- B. The Contractor shall furnish to the Director three (3) copies of a plan with the proposed playground equipment shown placed within the extents of the pad provided and indicating clear distances per "handbook for Public Playground Safety" of the U.S. Consumer Product Safety Commission are maintained.
- C. The following submittals shall be submitted after installation is complete but prior to acceptance of the playground equipment system:
  - 1. Provide written certification by a Certified Playground Safety Inspector registered with the National Playground and Safety Institute (NPSI) that the playground installation conforms to the CPSC's current edition of the Handbook for Public Playground Safety, the 2010 ADA Accessible Design Standards and the applicable ASTM standards. The written certification shall include the CPSI's certificate and professional contact information. Cost for this work shall not be paid for separately but shall be incidental to the project.
  - 2. The Contractor shall furnish to the Director three (3) copies of the warranty information as described in Section 2.0, B specific for this project.
  - 3. Furnish one original and two copies of the contractor's Guarantee.

#### 1.05 STORAGE OF MATERIAL

- A. All products shall be delivered to the job site, packed separately and properly

labeled. Contractor shall immediately review delivered products against the packing list and complete inventory listing of parts to determine that all requisite components are delivered to the project site in acceptable condition.

- B. Deliver, handle, store and protect products to prevent damage and to maintain security.

#### 1.06 QUALITY ASSURANCE

- A. Installation foreman shall have not less than five (5) years prior experience of similar installations in the State of Hawaii dating back a minimum of one calendar year from the projected installation date for this project. The contractor shall submit a detailed resume of work for the installation foreman listing projects, locations, customer contact information to coordinate and review the component parts of the playground equipment system to prove compliance with this requirement.
- B. The installation foreman shall be present at the job site personally overseeing all playground equipment preparatory, installation and cleanup work **at all times**.
- C. The playground equipment installation contractor shall be certified by the playground equipment manufacturer for installation of its product. The contractor shall submit, prior to commencement of installation, a letter specifically prepared for this project (naming the contractor's company, the project name and number) attesting to their certification.

#### 1.07 GUARANTEE

The playground equipment installation contractor shall provide a written guarantee, on its company letterhead signed by one of its corporate officers that provides for the full replacement of any defective parts or components and of all stainless steel fasteners that exhibit signs of rust within one year of acceptance of the project.

#### 1.08 WARRANTY

- A. Manufacturer to warrant all equipment to be free of defects in manufacturing and material.
- B. Manufacturer to provide a 100 year limited warranty for all stainless steel fasteners, aluminum posts, clamps, beams and caps, against structural failure due to corrosion/natural deterioration or manufacturing defects.
- C. Manufacturer to provide a 15 year limited warranty for all plastic and steel components against structural failure due to corrosion/natural deterioration or manufacturing defects.
- D. Manufacturer to provide a 5-10 year limited warranty for all structural steel frames against structural failure due to natural deterioration or manufacturing defects.
- E. Manufacturer to provide 3 year limited warranty for all other parts against structural failure due to natural deterioration or manufacturing defects.
- F. Manufacturer to provide a 15 year limited warranty for on all perforated steel decks; stainless steel slides aluminum slides and tubular steel parts.

## 1.09 SAFETY GUIDELINES AND STANDARDS:

- A. All materials and equipment shall conform to the current issue of the "Handbook for Public Playground Safety" published by the consumer Product Safety commission (C.P.S.C.) and ASTM F1487. The contractor, manufacturer and playground Installation subcontractor shall be responsible for correcting all violations of the C.P.S.C. Guidelines and ASTM F1487, to the satisfaction of the Director, should they be found identified after installation. All labor, equipment and material costs associated with the correction of these violations shall be borne solely by the contractor.
- B. The playground equipment shall satisfy the requirements of the current ADA Accessibility Guidelines (ADAAG) Section 15.6 Play Areas. Additional play equipment components /elements required beyond those listed in this section shall be provided by the Contractor incidental to this work such that the minimum accessibility requirements are satisfied.

## **PART 2 - PRODUCTS**

### 2.01 MANUFACTURERS

- A. The playground equipment described in this section shall be an integrated system provided by a single playground equipment supplier for the expressed purpose of creating a unified playground experience that will be warranted by that single entity. Assembling equipment sourced from different suppliers to satisfy the minimum requirements for this project is expressly prohibited.
  - 1. Manufacturer shall have a minimum of ten (10) years of documented experience in manufacturing playground equipment systems in the United States of America similar to that required of this project.
  - 2. For reasons of convenience and to establish minimum standards of quality, character, design aesthetics, performance, functionality and experiential quality for this project. The products of the following manufacturer is incorporated into these specifications in addition to the general descriptions of the minimum required playground components:

GameTime®, a PLAYCORE company

- 3. The products of other manufacturers not listed herein shall be pre-qualified in accordance with paragraph 6.2 SUBSTITUTION OF MATERIALS AND EQUIPMENT of the County's General Requirements and Covenants as amended by the Special Provisions.

The burden of proof as to the comparative quality and suitability of any alternate brand or make shall be upon the bidder, and it shall furnish, at its own expense, all information relating thereto at the time of making such a request. The County shall be the sole judge as to the suitability of the alternate brand or make, and its decision shall be final. Additionally, the requestor shall identify the components it proposes to use in satisfaction of the specific play equipment components described in paragraph 2.02.E of this section. Approval of any substitution request does not inherently provide approval for derivations from any other requirement of this section or of the project.

At minimum, the following shall be provided in order for the County to determine acceptability of the products proposed for substitution:

- a. A complete manufacturer's design guide/handbook, in color, that depicts the products it proposed for consideration on this project as individual components and as part of larger system in a real-world type application appropriately marked and labeled for ease of reference by the County.
- b. A parts sheet and/or installation sheet that clearly depict the method of installation/attachment to the overall system and that identify the appurtenances and accessories required for installation.

## 2.02 PLAY EQUIPMENT

- A. Playground equipment must be of modular design and include all elements listed in the specifications and shall fit within the Buildable Playground Area (hereinafter "BPA") as shown on the plans, inclusive of all requisite fall safety zones, edge transitions, perimeter curbing, additional required surfacing, graded areas, and other physical improvements.
- B. The colors of all exposed components of the playground equipment (posts, decks, brackets, panels, roofs, shades, slides, rails, supports, play elements, etc.) shall be selected specifically by the Director prior to ordering. Color selections shall be made from all available manufacturers' colors for each component irrespective of price range differences except that custom-mixed color services available only upon special request shall not be incorporated into this project. There shall be no limitation as to the number of colors that may be incorporated throughout the playground equipment.
- C. The play areas shall be configured such that the transfer platform is in close approximation to the entry walkway.
- D. The following list of play equipment and components is intended to set forth the minimum character, aesthetic, function and experiential qualities desired for this project.

### 1. **Play Area (5-12 year olds)**

- a. Main deck upright supports shall be 5" diameter embedded a minimum of 32" (or greater as required by manufacturer); shall not be less than 32" whatsoever.

- b. Play element/component list:

- i. (3) Perforated metal arched shaped roofs

GameTime®: 80104 Perf Metal Roof  
Miracle®: 714-565 Mesh Roof w/ Arches  
Little Tikes: 200127153 Arch Roof

- ii. Rotationally molded double-bedway straight slide attached to a min. 48" deck.

GameTime®: 90508 Double Zip Slide  
Miracle®: 714-565 Mesh Roof w/ Arches

Little Tikes: 200006976 Double Wide Plastic Slide

- iii. Rotationally molded 30" diameter straight tube slide attached to a min. 36" deck.

GameTime®: 90286 Straight Tube Slide

Miracle®: 714-739-3 Straight Tube Slide

Little Tikes: 200006983 Tunnel Slide

- iv. Rotationally molded straight wavy slide attached to a min. 36" deck.

GameTime®: 90503 Wave Zip Slide

Miracle®: 714-670 Chameleon II Slide

Little Tikes: 200201024 Wave Slide with Hood

- v. Two-Deck SpanTrain Themed Play Event; minimum 36" x 72"; to include train themed HDPE panel enclosures, Rotationally molded boiler, smoke stack, & cowcatcher, Rotationally molded 30" diameter 36" long crawl tube, and metal arch roof.

GameTime®: 81686 Train Locomotive

Miracle®: 714-646-2B (2) Train Front Wheel

714-646-3B Train Rear Wheel

714-646-1 Full Miralene Train Window

714-602-11 (2) Steel Window Panel

714-565-TRN Train Mesh Roof w/ Arches

Mesh Roof Extensions w/ Arches

714-757-34TRN Climbing Wall Train Cow Catcher

Little Tikes: (2) 200109865 Safety Rail Panels

(2) 200201475 Train Gear Panels

200007112 Bubble Panel

200201476 Smoke Stack

200201336 Train Cattle Guard

200127153 Arch Roof

- vi. Arched Bridge Link

GameTime®: 90393: Mini Arch Bridge

Miracle®: 714-970-49 Arch Bridge

Little Tikes: 200200392 Arch Bridge w/Guard Rails

- vii. (2) Train Themed HDPE Panels

GameTime®: 90465 Train Cabin

Miracle®: See v.

Little Tikes: (2) 200200785 Monkey Lean Out Rail

- viii. Seat and table below deck

GameTime®: 81665: Seat and Table for Two

Miracle®: 714-715-7B Rest Stop

714-7158B Tot Table

Little Tikes: (2) 200109899 Seat Panels

200093380 Play Table

- ix. Arched Metal Climber with rubber coated footholds

GameTime®: 90072 Fat Pipe Climber  
Miracle®: 714-967 Curved Climber  
Little Tikes: 200202781 Arch Log Climber

- x. Rotationally molded curved crawl tube connecting decks at a min. 36" over two-deck spans.

GameTime®: 90595 "S" Crawl Tube  
Miracle®: 714-745-6 "S" Crawl Tube  
Little Tikes: 200041634 "S" Crawl Tunnel

- xi. Rotationally molded wavy plastic climber attached to a min 36" deck.

GameTime®: 90545 Wave Climber  
Miracle®: 714-787 Tot Rock Climber  
Little Tikes: 200200180 Infinity Climber

- xii. Rotationally molded vertical climber

GameTime®: 90592 Ridge Climber  
Miracle®: 714-608-3 Wavy Wedge Wall Walker  
Little Tikes: 200202475 Tilted Rock Wall

- xiii. Transfer platform and step

GameTime®: 80688 transfer platform  
Miracle®: 714-851-49 Square Transfer Point  
Little Tikes: 200202561 Transfer Station

- xiv. 90 degree bridge connecting min. 36" high decks over min. 96" span.

GameTime®: 90583 Funnel Bridge  
Miracle®: 714-856-L9 90 Degree Level Ramp  
Little Tikes: 200200100 90 Curved Bridge

- xv. Minimum (2) rotationally molded play panels

GameTime®: rotationally molded play panels  
Miracle®: 714-983-1 Marble Races Panel  
714-756 Sight-N-Sound Panel  
Little Tikes: (2) 200200506 Gear Reach Panels

- xvi. Whistle

GameTime®: 81695 Train Whistle  
Miracle®: 714-796-P1 Post Mounted Bell  
Little Tikes: 200202538 Deck with Bells (Added Play Value)  
(2) 200058823 Talk Tubes

xvii. Spiraling metal climber with HDPE steps

GameTime®: 90668 Spiral Step climber  
Miracle®: 714-867-25 Twisted Vine Climber 4' Deck  
Little Tikes: 200200690 Infinity Wings Climber

xviii. Freestanding Playhouse with arched uprights, HDPE walls panels, HDPE roof panels, HDPE countertops, HDPE chimney, metal seat, and min. 2 themed activity panels.

GameTime®: 36059 Nature Discover Playhouse  
Miracle®: 714-713-7B Store Front Panel  
714-966-3B (2) Fence Post  
714-966-2B Sit-N-See  
714-866-2 Triple Play Roof  
Little Tikes: Village House  
200054651 Village Window Panel  
200054652 Village Door Frame  
200054654 Village Seat Panel  
200054659 Village Animal Panel  
200054653 Village Counter Panel  
200202457 Theater Panel  
200060686 Quad Roof

xix. (7) Freestanding rotationally molded trees configured in a maze

GameTime®: 39017 Large Conifer Maze  
Miracle®: 704-620 (7) Big Timber Post Topper  
Little Tikes: (7) 100005464 Palm Trees

xx. Freestanding straight post spinner

GameTime®: 36035 Centrix  
Miracle®: 945-1 Saddle Seat w/ Angled Post  
Little Tikes: 200007037 Log Roll

xxi. Freestanding belt seat rocker

GameTime®: 36034 Toddle Rocker  
Miracle®: 826 Balance Board w/ Posts  
Little Tikes: 200201539 Stand-N-Spin

- c. Provide as many ground level activities as required either at low level of deck or free standing elements. A minimum of these activities shall be Compression-molded plastic panels. Two (2) color minimum each panel.

Miracle®: 900-P1 Steering Wheel  
796-P1 Post Mounted Bell  
714-994 Fun Fone

- d. Barriers: Provide compression molded plastic barriers, no pipe style barriers allowed unless specifically called for on the plans.

- e. Decks: Provide an array of connected, multi-level deck areas at the following

specified minimum heights and areas to create an engaging and challenging experience for children utilizing the playground equipment with 5" diameter posts for the main deck-support uprights. All decks shall be completely covered with roofs.

- i. Minimum of 36 square feet of PVC coated decks at 36" minimum height.

Miracle®: 31 square feet at 36"

Miracle®: 56 square feet at 48"

- ii. Minimum of 12 square feet of PVC coated decks at 42" minimum height.

Miracle®: 16 square feet at 42"

- f. Though not listed or described in detail, the contractor shall provide all appurtenant components and accessories necessary for a complete system based on these requirements, which shall include, but not necessarily be limited to, additional, decks, transitions, brackets, supports, panels, rails, fittings, fasteners, etc., which are the contractor's responsibility to provide for as a part of its complete play equipment package.
- g. Substitutions: The Director shall have the sole right to determine the acceptability of any proposed substitution of play components or play systems based on factors such as durability, physical effort required, play experience, aesthetics, maintenance care requirements, etc. The Director's decision shall be final. The contractor shall solely bear the burden of proof that its products proposed for use on this project meets or exceeds the intent of the play equipment component list and ALL requirements of these specifications, to the satisfaction of the Director.
- h. The play equipment layouts provided on the plan sheets that accompany these specifications is intended to illustrate to all prospective bidders that the play equipment requirements included herein can be satisfied within the buildable play area required of this project.

## 2.03 MATERIALS

- A. Playground Equipment shall comply with the latest edition of the "Handbook for Public Playground Safety" of the U.S. Consumer Product Safety Commission, ASTM F 1487 and IPEMA certified.
  - 1. For posts that are a plate/surface-mounting system: mounting brackets, plates flanges, and fittings must be manufactured of non-corrosive materials. Expansion bolts used for installation may be set in place and hand tightened as early as three (3) days after concrete pour but must NOT be fully-anchored until after 21 calendar days.
  - 2. Footings: Unless otherwise specified, the bury on all footings shall be 34" below Finished Grade (FG) on all in-ground play events/posts.
  - 3. Mounting panel brackets, connecting angles, fasteners, and collars must be constructed of non-corrosive metal and must be tamper-resistant. All connecting bolts and washers must be stainless steel per ASTM F 9879. All primary fasteners shall include a locking patch type material that will meet the minimum torque requirements of IFI-125. Manufacturer to provide special tools for pinned tamperproof fasteners.

4. All materials shall be structurally sound and suitable for safe play.
5. All materials and supplies furnished under this project shall be new and protected from corrosion. Anti-corrosive treatments shall meet the following requirements.
  - i. Polyvinyl Chloride (PVC) coating: All metal components to be PVC coated shall be thoroughly cleaned in a hot phosphatizing pressure washer, and then primed with a water-based thermosetting solution. Primed parts shall be preheated prior to dipping in U.V. stabilized, liquid polyvinyl chloride, and then salt cured at approximately 400 degrees. The finished coating shall be approximately .080" (+/- .020") thick at 85 durometer hardness and have a matte finish.

OR

Polyethylene (PE) coating: All metal components to be PE coated shall be thoroughly cleaned in a hot phosphatizing pressure washer. Primed parts shall be preheated prior to dipping in U.V. Stabilized, polyethylene copolymer-based thermoplastic powder until the coating reached its target thickness, and then salt cured at approximately 400 degrees. The finished coating shall be 45 to 55 mils on the wear surfaces and 30 mils on other surfaces.

- ii. Polyester Powder coat finish: All metal components shall be thoroughly cleaned and phosphatized through a minimum five-stage bath system. Parts are then thoroughly dried, preheated and processed through a set of automatic powder spray guns where an epoxy primer is applied. The parts are allowed to cool and then pass through a second set of automatic powder spray guns. A minimum .002" of architectural-grade Super-Durable polyester TGIC powder is applied. The parts are oven-cured at 400 degrees F metal temperature for 10-minutes. The average film thickness is .006".

The finish must be formulated and tested per the following ASTM standards. Each color must meet or exceed the ratings listed below:

ASTM D3363 Hardness:.....	\rating 2H
ASTM C2794 Impact:.....	80 inch-pounds min.
ASTM B117 & D 1654 Salt Fog Resistance:..	4,000 hrs; rating 7 or greater
ASTM G 154 UV Exposure:.....	(340 bulb) 3,000 hours, rating delta E of 2, and 90 percent gloss retention
ASTM D3359 Adhesion:.....	.(Method B) rating 5B

- iii. Rotationally Molded Poly Parts: These parts shall be molded using prime compounded linear low-density polyethylene with a tensile strength of 2500 psi per ASTM D638 and with color and UV-Stabilizing additives.
- iv. Permalene Parts: These parts shall be manufactured from 3/4: thick high-density polyethylene that has been specially formulated for optimum U.V. stability and color retention. Products shall meet or exceed density of .960 G/cc per ASTM D1595, tensile strength of 2400 PSI per ASTM D638. Products shall meet or exceed density of .960 G/cc per ASTM D1505, tensile strength of 2400 PSI per ASTM D638.

## B. Composite System Materials

1. Decks: All decks shall be of modular design and have drain holes on the standing surface. Decks shall be manufactured from a single piece of low carbon 12 GA (.105") minimum sheet steel conforming to ASTM specification A-569. The sheet shall be perforated then flanged formed and reinforced as necessary to ensure structural integrity. The unit shall be PVC or PE coated.
2. Posts: Post length shall vary depending upon the intended use and shall be a minimum of 42" above the deck height. All posts shall be powdercoated to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 34" bury line required for correct installation and the top of the protective surfacing.

### a. Steel Posts

- i. All 5" OD steel posts shall be manufactured from tubing with a minimum wall thickness of .120" and shall be galvanized after rolling and shall have both its interior surfaces and the cut ends sprayed with a corrosion resistant coating.

#### 5" OD Steel Post Mechanical Properties:

Yield Strength (min):	50,000 PSI
Tensile Strength (min):	50,000 PSI
Elongation in 2 inches:	25%
Modulus of Elasticity:	29.5 x 1,000,000 PSI

- ii. All 3 1/2" OD posts shall be galvanized after rolling and shall have both the I.D. and the cut ends sprayed with a corrosion resistant coating.

3 1/2" OD, 8 ga.	48,000 PSI
Tensile Strength (min)	48,000 PSI
Yield Strength (min)	45,000 PSI

3 1/2" OD, 13 ga.	
Tensile Strength (min)	55,000 PSI
Yield Strength (min)	50,000 PSI

- iii. All 3 1/2" OD cantilever steel posts shall be manufactured from tubing with a wall thickness of min 8 gauge and shall be galvanized after rolling and shall have both the I.D. and the cut ends sprayed with a corrosion resistant coating.

### b. Steel Arch Posts

Shall be an all welded assembly fabricated of 3/5 in. outside diameter, 11 gauge galvanized steel tubing (arch), 4 in. outside diameter, 8 gauge galvanized steel tubing (sleeve), and 1006 cold rolled steel.

### c. Aluminum Posts

- i. All aluminum posts shall be manufactured from extruded tubing conforming to ASTM B-221 from 6005-T5 if not welded or 6061-T6 if welded. Posts shall have a 5" outside diameter with a 1/125" wall

thickness. Finished with a baked on polyester powder coating.

ii. Aluminum Post Mechanical Properties:

Yield Strength (min):	35,000 PSI
Tensile Strength (min):	38,000 PSI
Elongation in 2 inches:	10%
Modulus of Elasticity:	10 X 1,000,000 PSI

3. Post Caps:

- i. Top caps for posts shall be aluminum die cast from high strength aluminum alloy and powdercoated to match the post color. All caps shall be factory installed and secured in place with self sealing drive rivets. A molded low-density polyethylene cap, with drain holes, may be pressed onto the bottom end of the post to increase the footing area.
- |                         |            |
|-------------------------|------------|
| Yield Strength (min):   | 21,000 PSI |
| Tensile Strength (min): | 40,000 PSI |
- ii. A cap, with drain holes, must be pressed onto the bottom end of posts as exposed areas.

4. Steel Tubing:

- i. 3.5" OD, 8ga.
- |                         |            |
|-------------------------|------------|
| Yield Strength (min):   | 45,000 PSI |
| Tensile Strength (min): | 48,000 PSI |
- ii. 3.5: OD, 13 ga.
- |                         |            |
|-------------------------|------------|
| Yield Strength (min):   | 50,000 PSI |
| Tensile Strength (min): | 55,000 PSI |

5. Kick Plates

- a. Fabricated from 11 GA (.120") HR flat steel. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated.

6. Clamps: All clamps, unless otherwise noted, shall be die cast using a 369.1 aluminum alloy and have the following mechanical properties:

Ultimate Tensile:	47,000 PSI
Yield Strength:	28,000 PSI
Elongation:	7% in 2 inches
Shear Strength:	29,000 PSI
Endurance Limit:	20,000 PSI

7. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated. All primary fasteners shall include a locking patch-type material that will meet the minimum torque requirements of IFI-125. Manufacturer to provide special tools for pinned tamperproof fasteners.

8. Barriers to be fabricated from 7 GA. (.188") HR zinc plated flat steel.

a. Pipe Barriers:

- i. Weldment comprised of 5/8" solid steel vertical rails, 1 1/8" O.D.x 11 GA (.120") steel horizontal rails with 203 or 303 stainless steel welded inserts with 5/8" internal threads, 1 1/2" x 1 1/2" x 29 1/2" angle iron. Barrier measures 33 7/8" wide x 39 13/16" high. Finish: PVC Coating.

- ii. 90° Bracket: Formed from 1/4" x 1 1/4" HRPO flat steel. Finish: Powdercoat.

9. Spacer Tubes

- a. 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish Powdercoat.

**PART # - EXECUTION**

3.01 INSTALLATION AND WORKMANSHIP

- A. The layout of the playground equipment shall be verified jointly by the installation contractor and general contractor after the perimeter concrete curb and subsurface grade preparation have been completed and prior to the excavation of any footings or thickened slab conditions. Safety zone limits, slopes, tie-ins, clearance requirements, etc. Shall all be confirmed prior to commencing equipment installation.
- B. Excavation for direct-bury footings shall be performed carefully so as to minimally disturb the prepared sub-grade. All posts and supports shall be affixed and completely encase in concrete up to the level of the underside of the safety surfacing system's installation. At no time shall any component of the playground be in contact with native or non-native soil or fill, including any prepared or compacted gravel that could be considered part of the safety surfacing system.
- C. Concrete footings/foundations shall be poured directly against the limits of excavation; footings shall not be formed and backfilled. Exposed surface of concrete footings shall be trowelled level and smooth.
- D. Installation of the playground equipment shall be performed by the installation contractor that is certified by the manufacturer.
- E. Installation shall closely follow all manufacturers' instructions and comply with all applicable manufacturers' recommendations.
- F. Installation of Compound Structures and Independent Activities:
  - 1. Conform strictly to manufacturer's instructions using all appropriate materials, tools and accessories as required. Use only experienced personnel trained in play equipment construction. Layout all equipment prior to construction to insure compliance with safety zone clearances.
  - 2. Provide all concrete footings as required to properly place the equipment components.
- G. Extreme care shall be exercised at all times during the installation stage of the project to prevent scratching, gouging, denting, twisting, warping, cracking or other result detrimental in any way to the finished product. All damage, regardless of how

insignificant it may seem at the time, shall be tagged and photographed, and brought immediately to the attention of the Director. No repairs or touchups shall be implemented until the Director has had the opportunity to investigate the extent of the damage or made his/her determination on whether repair on site is acceptable or full replacement warranted. All items repaired prior to the Director's decision may be rejected at any time by the Director.

- H. The Director reserves the sole right to determine whether any blemish, incursion or damage to any part of the playground necessitates its replacement. All such decisions by the Director shall be final and the costs associated with the removal, replacement and reinstallation by the contractor shall be the contractor's sole responsibility.
- I. The Director reserves the right to determine, based on the nature and extent of the damage, whether the corrective action is acceptable as punch-list item or if it is essential to the initial acceptance of the overall system.
- J. Any repair approved by the Director shall be implemented in strict accordance with the manufacturer's requirements and shall not in any way void or alter the warranty or guarantees required of the project.

### 3.02 PROTECTION

Protection of the playground equipment from its arrival on the project site, through construction/installation of the playground equipment and the related playground safety surfacing system, and until acceptance by the County shall be the sole responsibility of the contractor. The contractor is hereby notified that playgrounds under construction are attractive nuisances and it is common for members of the public to circumvent construction barricades to climb upon, vandalize, damage and otherwise use such without authorization.

The contractor is therefore solely responsible to take all measures necessary, beyond the minimally required temporary barricade, to ensure the public does not enter the construction site at all times; park closure hours shall not relieve the contractor of its responsibility to secure its worksite nor shall it shift any responsibility to the County for security or otherwise.

Should the contractor decide to post security personnel on the site, such personnel shall meet be a registered uniformed individual(s) that holds a guard license from the Board of Private Detectives and Guards, Department of Commerce and Consumer Affairs, State of Hawaii in accordance with Hawaii Revised Statutes Chapter 463 and the Director shall be notified in advance of such. The Director shall be provided personnel's name and contact information, company name, insurance and other pertinent information as may be required by the County at the time.

### 3.03 INSPECTION

- A. An authorized representative of the playground equipment supplier shall review and inspect the playground equipment installation to ensure all components (play elements, decks, roofs, panels, etc.) and accessories (bolts, fasteners, connectors, etc.) are correctly installed per the manufacturer's requirements and that the installation as a whole is warrantable and guarantee-able. The representative shall check, at minimum, to see that all components are properly secured, no

entrapment/entanglement conditions exist, all moving parts do so freely, all fasteners are properly tightened/secured, etc.

- B. The prime contractor (not the playground equipment installation contractor) shall secure the services of an independent Certified Playground Safety Inspector certified by the National Playground Safety Institute, who is not in any way affiliated with the installation contractor or its supplier, to perform a thorough inspection/testing of the completed playground equipment installation in conformance with the NPSI's standards. At minimum, the inspector shall verify compliance with the applicable requirements of the 2010 ADA Standards, U.S. Consumer Product Safety Commission's Handbook for Public Playground Safety, and all referenced ASTM standards.
- C. The contractor shall pay for all testing and laboratory fees.
- D. The contractor shall coordinate the testing with the Director so that a representative from the County is present during the inspection.
- E. The test results shall be provided in a typed or clearly printed format with each test area identified by a photo and marked on a plan of the play area. Results shall be sent directly to the Director and, at minimum, the report shall include:
  - a. Name, mailing and business addresses, phone, fax and email address of the company the inspector works for.
  - b. Name, mailing and business addresses, phone, fax and email addresses of the inspector - if different than the company's.
  - c. County project name and number.
  - d. Report No.
  - e. Client name, address and telephone number
  - f. Location
  - g. Date
  - h. Determination of results
  - i. Certification of company or agency that testing representative works for.
- F. The contractor shall send a copy of the inspector's report to the playground equipment supplier and request instruction on the proper resolution of each outstanding condition. No repair work, unless it poses an imminent safety risk, shall be performed prior to obtaining the playground equipment supplier's instructions. At no time shall any corrective work be performed that has not been concurred with by the Director or that would in any way jeopardize or nullify all or part of any warranty or guarantee required of the project.

### 3.04 CLEAN UP

- A. Perform a thorough cleaning of all exposed surfaces of the playground equipment,

per the manufacturer's recommendations, prior to final inspection. At minimum, all labels, wrapping, adhesive residue, dirt, dust, shavings, and other superficial blemishes shall be removed.

- B. Perform a thorough final cleaning of the entire playground equipment, lubricate all moving parts and visually inspect the condition of the playground prior to acceptance by the County.

### 3.05 CLOSEOUT

- A. The Contractor must submit three (3) copies of its standard maintenance manual to the Director.
- B. Contractor must train Director's designated field personnel in proper cleaning and care procedures. This includes training field personnel how to properly use grooming equipment as well as make minor repairs.
- C. Extra materials: Contractor shall deliver extra materials, in the amounts specified, to the Department of Parks and Recreation's Maintenance Division's main base yard at 35 Railroad Avenue, Hilo.
  - 1. Provide a minimum of five (5) hand tools and five (5) power drill bits for each type of fastener head used on the playground equipment. They may be the same units used on this project provided they are in acceptable condition.
  - 2. Provide a minimum of five percent (5%) of each type of fastener (i.e., screw, nut and bolt w/washer, etc.), cotter pin, etc. used on this project.
  - 3. Provide a minimum of four (4) sets of each type and color of pole clamps.
  - 4. Provide one (1) container of manufacturer's color-matched touch-up paint for each color metal component.
  - 5. Provide two (2) containers of manufacturer's color-matched repair kit for the deck coating material.

END OF SECTION